

Burmese Roller which dived head first into a tank and after being momentarily submerged flew up to its perch. The bird repeated the operation 4 times. The author of the note presumed that the roller was catching its prey in the water. In the same volume, page 853, Mr. Gordon Dalgliesh refers to a letter written by him in the *Field* in which he commented on a Roller hovering over water and plunging headlong into the stream. Neither of the writers had seen the bird return from its plunge with its prey in its mouth. The dive and the momentary submersion is evidently the bird's method of taking its bath. Other birds we have observed bathing in this way are the King Crow and the Indian Oriole. Eds.]

### XXXI.—NIDIFICATION OF STORKS

(With a photo)

The White-necked Stork (*Dissoura episcopa episcopa*).

On the 18th of October last I came upon two nests of this stork on a Babul Tree (*Acacia arabica*) growing in the middle of an artificial lake, which is dry during the hot weather, at Abu Road. One of the nests was empty while the other had two fully-fledged young in it. One of them flew away when I got up the tree. I captured the other which, in spite of the hacking of the branches and breaking up of the nest, made no attempt to escape, but remained sitting low in the nest. The nests were composed of twigs of the same tree, about three feet six inches in diameter. The centre was lined with a little grass and other rubbish. In depth it was deep enough to hide the bird when sitting close. Both parent birds were at the nest when I got to it but they flew off making no attempt to defend it.

Regarding the young birds the 2nd edition of the 'Fauna of British India' (Birds) says:—'Young birds have the glossy black replaced by dull brown, un glossed'. The colouration of the specimen obtained by me agrees with the description of the old bird. There was no dull brown about it and the gloss was distinctly present.

This young bird I kept in captivity for almost a month and handed it over to the local Zoo on my return to town. It became quite tame and fed from my hand. Its food consisted of fish, and mice when obtainable.

The only sound I heard this bird utter was a humming, much like that of a bear when sucking its paw. This it uttered whenever it saw me in the compound and whenever I approached it, bobbing its head repeatedly as if 'filling the bellows' each time it started it anew. Besides this it would 'drum' with its bill, like all storks, when alarmed by a dog or other animal. Frequently it would attack an animal if it approached too near.

The Black-necked Stork (*Xenorhynchus asiaticus asiaticus*).

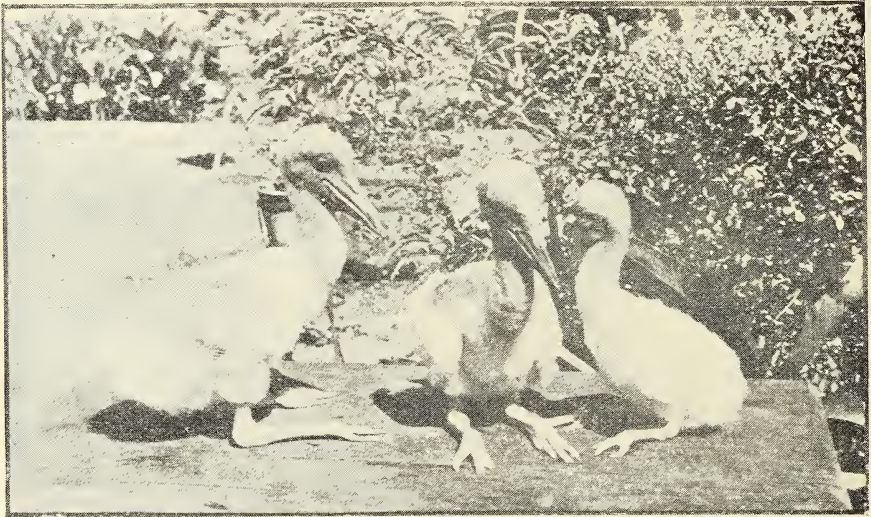
On the 14th of September last my brother-in-law discovered the nest of this species with two eggs in it high up on the top of a large Banyan (*Ficus indica*). On the 17th October I visited the spot and

found that it contained three young and one egg. The birds were very young and covered in short white down. I took the young and the egg. When I blew out the egg I found it to be quite rotten.

The nest was large, about 7 ft. in diameter, composed of twigs of a species of *Zizyphus* which was very common in the neighbourhood. The central portion was lined with straw and pieces of rags for about two feet in diameter. The nest itself was comparatively shallow and strong enough to bear the weight of a man.

When I reached the nest the parent bird was sitting in it. What surprised me most when I approached was, that though this bird was armed with such a powerful bill it did not attack, though I fully anticipated having a bad time. When I got up to the nest which was about 75 ft. from the ground, the parent bird just moved off to the periphery of the nest clapping its bill loudly and looked most aggressive but as soon as I came nearer it flew away, circled round the tree a couple of times and then went away and sat on a tree some distance away and watched the proceedings.

On my return past the same tree about half an hour later the bird was back at the nest. Days after when I passed the same spot I saw the bird at its nest again and on the 13th November when I left for Bombay, the train passed the spot, I looked out and found this bird at its nest again. I never saw the mate.



THREE NESTLINGS OF THE BLACK-NECKED STORK.

The young proved very interesting. No quills had appeared at this stage. The white down of the neck gradually disappeared about three or four days later and was replaced by a dark blackish-grey down from beneath, the white down crowning the black here and there. In about ten days the white down of the neck had disappeared completely. About the same time when the colour of the neck changed the scapulars began to sprout. These were the first quills to appear. A couple of days later the primaries began

to show themselves and then the other wing quills. The scapulars grew much faster than any of the other feathers, the primaries following next. The next feathers to appear were those leading from the scapulars towards the neck. All this time the down of the body had got much deeper.

The young feed readily by themselves on fish, cut up small, this proving that the parent birds must regurgitate the food they have brought into the nest for the young to pick up for themselves. The young would gorge themselves to such an extent that they would be full to the top, so much so that they were unable to keep their necks up. Frequently, if the fish was not satisfactorily packed in the gullet it would be brought up and reswallowed, if one of the others did not get it before the one engaged in the rearrangement.

The legs were fleshy white. About ten days after their capture they commenced to stand upright on their legs, only for a short while, from time to time, by way of exercise, otherwise they always rested in the usual sitting posture, 'stork fashion'.

The only sound the young made was first a sort of 'chack' followed by a 'wee-wee-wee' repeated two or three times. When they were approached and aroused from their sleep they would immediately get up stretch their necks and 'drum', to be followed by the sound described above.

They readily recognized the difference between man and animals even at this early age, for when the dog approached they would stand on their dignity, spread their little wings and launch out at the dog with their bills.

Unfortunately a couple of days before I left for Bombay something went wrong with them and the three died, thus leaving my notes incomplete.

Another nest of this species was discovered on the very top of a Tamarind tree (*Tamarindus*). The bird was sitting, but the nest was empty, presumably she was about to lay as she returned to it. This nest was visited on the 11th November.

So far as my observations go I have always found these birds feeding on the river during the day and late in the evening in fields not too far from a village, where it is possible they roost for the night. I have always seen them about in pairs when feeding.

On one occasion I was fortunate in getting two of these, the pair, in one shot, both were wounded and put up a big fight when I tried to capture them, drumming loudly all the while. While I was engaged trying to get hold of the wounded ones, another pair appeared in the sky and circled over the wounded ones also drumming all the while, but after investigating the cause of the alarm raised by the wounded flew away.

The wounded ones ran very fast but could not maintain the speed for long—100 yds. being their limit, after this they would turn round and face the enemy.

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